Title: UNIVERSAL PORTABLE ILLUMINATED ARTWORK MODULE
Application 09/878,456

DESCRIPTION AND OPERATION, ALTERNATIVE EMBODIMENTS

1) ARTWORK DISPLAY PLATEN ("Platen") Part No. 10

An option to preferred embodiment is employment of Platen itself as an independent artwork, upon or within which is imposed artwork of any description. A new art media is introduced hereby, in which application of paints, acrylics, chalks, pencils, etc. must be modified in order to render necessary translucency.

An option to preferred embodiment is employment of Platen itself as an independent artwork, upon or within which is imposed artwork of any description. A new art media is introduced hereby, in which application of paints, acrylics, chalks, pencils, etc., must be modified in order to render necessary translucency. Usual opacity of applied media will not permt sufficient light transmission to viewer.

.A further option to the Platen is lamination of two or more sheets of a translucent medium, either similar or dissimilar in: Color; In physical and light transferral properties; Of same or differing geometry and perimeteral dimensions; Or, any other features compatible to such laminating.

A further Platen option is the lamination of two or more planar or non-planar sheets of a translucent or transparent material. These sheets are either similar or dissimilar in: Color; In physical and light transmission properties; Of composition resulting in reaction to light such as fluorescing properties; Of same of differing geometry and dimensions; Or, any other features compatible to such laminating.

A further Platen option is the lamination of two or more planar or non-planar sheets of a translucent material or transparent material. These sheets are either similar or dissimilar in: Color; In Physical and light transmission properties; ~~Of composition resulting in reaction to light such as fluorescing properties~~; Of Same or differing geometry and dimensions; Or, any other features compatible to such laminating.

A further Platen option, as one of several related examples possible, teaches of an Platen being either clear of colored and preprinted with or otherwise defined designs for artistic direction.

A further Platen option as one of several related examples possible, teaches of a Platen being either clear or varicolored and preprinted with defined designs for artistic direction and completion by the artist.

A further option is an Platen that is colored, either wholly or in varicolored sections, to provide a background for artistic media application.

A further option is a Platen of one thickness or multiple dissimilar laminations, colored either wholly or varicolored sectionally, to provide a background for artistic media manipulative and inventive application.

A further option is a Platen ~~of one thickness or multiple dissimilar laminations~~, that is colored either wholly or varicolored sectionally, to provide a background for artistic media manipulative and artistically inventive application of media.

A further option is the incorporation into or onto the Platen, or a laminated variation thereof, of a substance caused to fluoresce when exposed to an ultra-violet or equivalent light source that is situate within Ventilated Light Box (Part No. 13), which part is described herein later.

A further option is the incorporation into or onto a single thickness Platen, or any laminated variation thereof, of a substance causing the Platen to fluoresce or otherwise react internally when exposed to an ultra-violet or other light source that is situate within Light Box (Part No. 13), which part is described herein later. This internal lighting effect permits unusual artwork illumination and expression.

Of further option is the incorporation into or onto a single thickness Platen, or an laminated variation thereof, of a substance causing the Platen to fluoresce ~~or otherwise react internally~~ when exposed to an ultra-violet or other equivalent light source that is situate within Light Box (Part No. 13), which part is described herein later. This internal lighting effect permits unusual artwork illumination and expression.

A further optional Platen is built upon by additional sheets or partial sheets of same or differing translucent materials, colored or white, or clear or opaque, as would be a work of stained glass, or an artistic collage.

A further optional Platen is rendered by addition of sheets or partial sheets of same or differing translucent or transparent materials, colored or not, clear or opaque, resulting in a work similar to stained glass or artful collage.

A further optional Platen is rendered by addition of sheets or partial sheets of same or differing translucent ~~or transparent~~ materials, colored or not, clear or opaque, resulting in a work similar to stained glass or artful collage.

A further option has all perimetral edges silvered or otherwise coated with any paint, foil, plastic, etc., that will defeat light exit from such edges and will redirect such light back into Platen proper. It is well known that perimetral edges of many plastics and other such materials, when light is directed upon their surfaces, will discharge light brightly.

No change.

A further option to Platen allows light to exit its edges into a picture frame which, if translucent at perimeter of Platen, will be caused to glow.

A further option to invention when mounted in a picture frame or similar device, permits light to exit Platen edges into surrounding containment structure of picture frame which, if translucent or transparent at perimeter of Platen, will be caused to glow uniformly or sectionally in accordance with selected lateral release of light from perimeter of Platen.

A further option to invention when mounted in a picture frame or similar device, permits light to exit Platen edges into surrounding containment structure of picture frame which, if translucent ~~or transparent~~ at perimeter of Platen, will be caused to glow ~~uniformly or sectionally in accordance with selected lateral release of light from perimeter of Platen.~~

A further option is bevelling or rounding downward the perimetral edges of Platen to surface level of Frame, which configuration will surround the artwork with a thin "light frame", especially when Platen is made of plastic material.

A further option is bevelling or rounding downward the perimetral edges of Platen to matching front surface level of Frame, which configuration will surround the artwork with a thin "light frame", particularly when Platen is formed of any material such as a plastic material, that directs a portion of light entering from lightbox outwardly to exit edges of Platen.

A further option is beveling or rounding downward the perimetral edges of Platen to matching front surface level of Frame, which configuration will surround the artwork with a thin "light frame", particularly when Platen is formed of any material such as plastic material, ~~that directs a portion of light entering from lightbox outwardly to exit edges of Platen.~~

A further option to Platen is attachment to surface facing viewer of a narrow reflector strip closely to edge of Platen, that will direct light outwardly onto adjacent surfaces of picture frame (which may or may not be translucent or reflective). Said reflector strip is made of any rigid material made reflective by means of back-coating, plating or any other

effective means, has either curved or flat section such as to reflect light from surface of Platen laterally onto the picture frame, without exposing such light to viewer.

A further option is attachment to surface of Platen facing viewer of a narrow reflector strip closely to edge of Platen, that will direct light outwardly to illuminate adjacent surfaces of picture frame (which may or may not be translucent or reflective). Said reflector strip is made of any rigid material made reflective by means of back-coating, plating or any other effective means, has either curved or flat section such as to reflect light from surface of Platen laterally onto the picture frame, without exposing such light to viewer.

A further Platen option contains wires, threads, fibers, or any other such filamentary means, disposed in any artful curvilinear or rectilinear manner fixed or loosely ordered to deliver enjoyment to viewer. Said fibrous means may or may not be colored, and may be sandwiched between two or more sheets of laminated means. A new artistic direction is enabled by such means.

A further option is any configuration of Platen containing wires, threads, fibers, or any other filamentary elements either singular, multiple strands or interwoven, disposed in any pleasingly artful manner, fixed or loosely ordered to deliver enjoyment to viewer. Said fibrous elements are colored, varicolored or uncolored, and are sandwiched between two or more laminated Platen sheets, or internally cast within one or more Platen sheets. A novel artistic expression is enabled by such means.

A further option to Platen is inclusion onto or into any Platen, filaments of metallic, ceramic or any other substance conductive to electricity. Such filamentary devices may cause Platen areas affected thereby to react in color when power is directed therein, notably when Platen contains elements permitting such light emanations, and/or when power is applied by means of controllable circuitry such as computer chips which themselves may be controlled remotely.

A further option to Platen is inclusion onto or into any Platen, filaments of metallic, ceramic of any other substance conductive to electricity. Such filamentary elements cause Platen areas affected thereby to react visibily when power is directed therein, notably when Platen contains elements permitting such light emanations, and or when power is applied by means of controllable circuitry such as computer chips which themselves may

be controlled remotely. Resulting illumination is in color or not.

A further option imposes upon, into or within the Platen or laminations of Platen, a digital clock face and/or any chart-like or grid-like pattern, perhaps reactive to electricity, useful to commercial and/or military interests, to be varied as called for by human remote control, which control may be directed by means of computer chip(s) situate on or within Platen or Ventilated Box assembly (Part No. 13). Endless interconnections of such conductors are possible and practical, to be controlled in production of visual effects desired. Module containing such Platen ideally would be mounted upon an easel.

A further option imposes upon, into or within the Platen or laminations of Platen, a digital clock face and/or any chart-like or grid-like pattern, reactive to electricity or not, useful to commercial and/or military interests, variable by human remote control, which control may be directed by means of computer chip(s) situate on or within body of Module. Endless interconnectins of such conductors are possible and practical, control of which is effected to produce visual effects desired.

A further option is reciprocal slidability to facilitate alternate or successive viewing of a multiplicity of Platens. Such slidable means are well known and may be attached to front face of Artwork Containment Frame (Part No. 11) into which a multiplicity of Platens may be fitted and alternated. A further option to such alternate/successive slideable means is a device to rotationally place Platens for viewing and may be disposed in either horizontal or vertical circulatory embodiment. Such rotational means are well known to the art, having been employed in projectors for photographic negatives, as one example.

No change.

A further option to any embodiment of Platen is introduction of a coordinated sound system to augment pleasure enjoyed by viewers of artwork, or to facilitate instruction and descriptions derived in commercial or military uses. Such sound systems may be controlled by remote control means that also may be used for visual displays.

A further option to any embodiment of Platen artwork is introduction into body of Module a coordinated sound system to augment pleasure enjoyed by viewers or artwork, or to facilitate instruction and descriptions derived in commercial or military uses. Such

sound systems are controlled by remote means that also may be used to combine audio effects with visual displays.

A further option to Platen is roughening of work surfaces by means of emery paper, sandblasting, etching, grit, or any other effective means. Such treatment will cause art media to bond more effectively to work surfaces and will discourage "sag" by flowable media.

No change.

It is notable that art media applied to work face of Platen may easily be removed by means of spirits, water, rags, scraping or any other suitable means. Thusly, a clean workpiece is made available to the artist to re-impose desired depictions, at will.

No change.

2) ARTWORK CONTAINMENT FRAME ("Frame") Part No. 11

Optional to Frame are planar surfaces, at viewer face, widened to accommodate Module to ornamental viewing frame such as a picture frame in order to fit a smaller Module to a larger viewing frame. Said widened surface may be finished in such manner as to blend with (or contrast to) viewing frame surfaces proximate to face of Module, perhaps to be covered by transparent or translucent sheet reactive to light or not, or by means of a coating of colored media.

Optional to Frame are planar or non-planar surfaces disposed toward viewer, widened to accommodate Module to a separate ornamental viewing frame such as a picture frame in order to fit a smaller Module to a larger external frame. Said widened surface ~~may be~~ finished in such manner as to blend with (or contrast to) viewing frame surfaces proximate to face of Module, perhaps to be covered by transparent or translucent sheeet reactive to light or not, or by means of a coating of colored material.

Optional to Frame are planar or non-planar surfaces disposed toward viewer, widened to accommodate Module to a separate ornamental viewing frame such as a picture frame

in order to fit a smaller Module to a larger external frame. Said widened surface ~~may be~~ is finished in such manner as to blend with (or contrast to) viewing frame surfaces proximate to face of Module, perhaps to be covered by transparent or translucent sheet reactive to light or not, or by means of a coating of colored material.

A further option is multiple, inter-changeable Frames dimensioned at front faces to accommodate Platens of varying sizes and media types.

Importantly, Frame may be rendered monolithic by application of sturdy corner braces, in the event large and/or heavy impositions require such benefit.

No change.

3) LIGHT DIFFUSION SCREEN ("Screen") Part No. 12

Optional Screen is produced by substitution of styrene, glass, or other effective material for preferred acrylic.

A further option is use of white or colored Sheet, either wholly or sectionally treated in one or more colors.

Use of acrylic light-diffusing screens is well-known to the art, but highly selective employment of such light-controlling elements in conjunction with innovative systems incorporated in present invention commands consideration as new and novel improvement. For example, use of light-diffusing screening either in singular or multiple thickness as the Platen itself, and upon which an artwork is depicted, is previously unknown to the art. Alternative diffusion Screening is made practicable by substitution of clear or translucent sheeting of colored or non-colored styrene, glass, or other effective material for preferred acrylic.

~~*An optional employment for Light Diffusing Screen is introduction of light into the Module only by means of insertion of individual light sources at intervals within edges of Sheet, or by surrounding perimeter of Sheet with illuminated glass or plastic tubing. Thus, Lightbox would be rendered a reflector only.*~~

An optional employment for Light Diffusing Screen is introduction of light into the Module only by means of insertion of individual light sources at intervals within edges of Sheet, or by surrounding perimeter of Sheet with illuminated glass or plastic tubing. Thus, Lightbox would be rendered a reflector only.

An optional employment for Light Diffusing Screen is introduction of light into the Module only by means of insertion of individual light sources at intervals within edges of Sheet, or by surrounding perimeter of Sheet with illuminated glass or plastic tubing.

A further option is use of Sheet, being wholly or sectionally treated in one or more colors, in singular or multiple thicknesses, or in multiple irregular parts arranged artfully, to disseminate light selectively with infinite variety of compositions.

A further option is use of Sheet, being wholly or sectionally treated in one or more colors, ~~in singular or multiple thicknesses, or in multiple irregular parts arranged artfully,~~ to disseminate light selectively with infinite variety of compositions.

4) VENTILATED LIGHT BOX ("Box") Part No. 13

Optionally, Box is formed of sheet metal, opaque plastic, ceramic, organic or inorganic compositions, or any other material suited to the purpose and duty, and which is coated internally with reflective means such as silvering, paint, metallic paint, tin plating or any other suitable means.

4) LIGHT BOX ("Box") Part No. 13

Optionally, Box is formed of sheet metal, opaque plastic, ceramic, organic or inorganic compositions, or any other material suited to the purpose and duty, coated internally with reflective means such as silvering, paint, metallic paint, tin plating or any other suitable means.

A further option is the imposition of a dimensioned Sheet to rear, internal surface of Box panel, fastened centrally by means of a machine screw with chrome-plated head passed through Box back panel and secured externally by means of washer and nut extending nominally outward to rear, in order to discourage mechanical abrasion and impact

damage to back outer surface of Box.

A further option is fixing of a rigid panel, conforming to interior contours of back of Box, to internal rear surface of Box panel and fastened centrally by means of a machine screw with chrome-plated head passed through Box back panel and secured externally by means of washer and nut extending nominally outward to rear, in order to discourage mechanical abrasion and possible impact damage to rear extenal surface of Box.

A further option is substitution of a piano hinge for Attachment Flange on one side of Box, or order to facilitate service access.

No change.

A further option is insertion and jointure of separate adaptor between Box and an assembly of other components of entire artwork display means having dissimilar dimensions.

A further option is fixing of separate adaptor between Box and forward assembly of Module when both elements have incompatible connectional configuration.

5) VENTILATION FLUES ("Flue") Part No. 14

An optional construction of Ventilation Flues is use of metallic wire screen, which must be black of dark in color, and fixed to body of Box by means of solder, cement or adhesive, or any other effective means.

A further option is use of a rigid, solid material in forming of Flue, interior surfaces of which are coated with a heat-tolerant black media, which Flue is fixed to body of Box by means of any suitable solder, weld, rivets, adhesive or cement or any other suitable bonding means or method.

A further option in attachment of Flue to Box is use of channel-shaped rigid strips over which Flue is slidably and tightly installed.

A further option is replacement of Flues at bottom of Light Box with one or more air blower(s) to force cool air into Box proper.

Top and bottom air ventilation openings in any confined configuration such as a light box are well known to the art, but devices appended thereto for the dual purpose not only of permitting air passage into and out of the confined area but at the same time denying exit of light from within the confined area are a new improvement to the art.

Conventional and preferred material for forming Ventilation Flues is sheet metal. Optional construction of Ventilation Flues employs fine-mesh metallic wire screen, black or dark in color, strongly fixed to exterior top and bottom body of Box by means of solder, heat-resistive cement or adhesive, or any other positive means.

A further option is use of a rigid and heat tolerant, moldable material in forming of Flue, interior surfaces of which are finished in raised, randomly profuse ridge-like protrusions to diffuse and discourage exit of light, and coated with a heat-tolerant black media. Flue is fixed to body of Box by means of any suitable solder, weld, rivets, adhesive or cement or any other suitable mutual-bonding means or method.

A further option in attachment of Flue to Box is fixing channel-shaped rigid strips to exterior of Box to span vent holes, onto which strips Flue is slidably and tightly installed.

A further option is replacement of Flues at bottom of Light Box with one or more air blower(s) to force cool air into Box proper.

6) LIGHT SOURCE Part No. 15

Optional to coating of half-length of incandescent bulbs is substitution of rotatable reflector "caps" such as those in wide use on night lights, mechanics' work lights, and the like.

Optional light sources are fluorescent, ultraviolet, infrared, neon, halogen or any other light source, colored or not.

A further optional light source is provided by means of coating interior of Box with a medium caused to fluoresce when exposed to ultraviolet light.

A further option is use of light sources in the primary colors, that individually may be

controlled by means of dimmer command, enabling viewer to adjust light falling upon artwork to any intensity, color or shading in order to intensify or diminish any effect desired (a sunset scene could be made to truly "come alive."

Optional to one-side coating of full length of incandescent bulbs is substitution of rotatable reflector "caps" such as those in wide use on night lights, mechanics' work lights, and the like.

Optional light sources are fluorescent, ultraviolet, infrared, neon, halogen or any other light source, colored or not and in non-uniform combination if desired for effect. A refined option is use of light sources in the primary colors, that individually may be controlled by means of dimmer command, enabling viewer to adjust light falling upon artwork to any intensity, color or shading in order to intensify or diminish any effect desired (a sunset scene could be made to truly "come alive").

A further optional light source is provided by means of coating interior of Box and Frame with a medium caused to fluoresce when exposed to ultravioilet light.

7) LIGHT SOURCE SOCKET Part No. 16

Options to preferred embodiment may be such as those supplied by Angelo Bros. Co. ("Snap-In Socket"), or many conventional small lamp sockets or "candelabra bases" set on threaded nipples secured by exterior crossbars.

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8) POWER CORD Part No. 17

Options to conventional power cords include inclusion of dimmer device controlled by timer to permit increasing or decreasing light brilliance of artwork displays, as programmed to viewer's pleasure.

A further option is use of threaded or press-on devices at power cord connections to VLB light sources.

A further option is use of "harness" composition of cable, cords and wire connections.

Options to conventional power cords include inclusion of dimmer device operated manually or preferentially controlled by timer to permit increasing or decreasing light brilliance of artwork displays, as programmed to viewer's pleasure.

Options to conventional power cords include inclusion of dimmer device ~~operated manually~~ or preferentially controlled by timer to permit increasing or decreasing light brilliance of artwork displays as programmed to viewer's pleasure.

A further option is use of threaded or press-on devices at power cord connections to Light Box light source.

A further option is use of "harness" combinations of cable, cords and/or wire connectors, gathered into a single cable outside Box and so fed into a single plug-in connective device.

9) LIGHT BOX ATTACHMENT FLANGE Part No. 18

An alternate is substitution of a piano hinge for Flange on one side of Box.

An alternate to Flange on one side of Box is substitution of piano hinge for that Flange.

A further option is Flange secured to Frame by means of clamping device such as spring clamp, rotatable clip, elastic compression, cinched strap, slidable or any other device effectively securing Box to Frame.

A further option is Flange secured to Frame by means of clamping device such as spring clamp, rotatable clip, elastic compresssion, cinched strap, slidable or any other device effectively securing Box to Frame, in combination with piano hinge or not.

A further option is Flange secured to Frame by means of clamping device such as spring clamp, rotatable clip, elastic compression, cinched strap, slidable or any other device effectively securing Box to Frame, ~~in combination with piano hinge or not.~~

10) LIGHT BOX VENT HOLE Part No. 20

An option to simple vent hole(s) is employment of blower(s) to force cool air into body of Light Box.

A further option is use of pre-cooled air forced into body of Light Box at bottom.

An optional improvement of simple vent hole(s) is installation of air blower(s) at lower vent holes to force ambient air through Light Box.

A further option for large Light Boxes containing multiple light sources is forcing pre-cooled air into body of Light Box at bottom.

A further option <u>is use of pre-cooled air forced</u> ~~for large Light Boxes containing multiple light sources is forcing pre-cooled air~~ into body of Light Box at bottom.

11) COMPRESSIBLE SPACER Part No. 21

Optionally, Spacer may be secured to front or to back edges of ADP, rather than being a separate element.

Optionally, Spacer may be secured to front or to back edges, or both, of Platen, rather than being a separate element.

Optionally, Spacer ~~may be~~ <u>is</u> secured to front or to back edges or both, of Platen, rather than being a separate element.

A further option is employment of one or more sheets of Light Diffusion Screen to fill space between Platen and mounting ledge of Frame.

A further option is employment of one or more sheets of Light Diffusion Screen to fill space between back of Platen and mounting ledge or front edge of Frame.

12) ARTWORK CLAMP Part No. 22

Optional devices are available commercially to hold together two planar elements are spring clips and clamps, compression clamps, slide latches and the like.

May conventional clamping devices are well known to the art, but when employed to improve upon existing art become operational devices to the new. Several dissimilar devices are available commercially to secure together two or more contiguous parts, and include spring clips and clamps, compression clamps, slide latches and the like.

CONCLUSION, RAMIFICATIONS AND SCOPE OF INVENTION

It has been demonstrated herein that present invention conveys a wide array of inherent advantages not enjoyed previously by art relating to display of backlighted artwork. While DESCRIPTION contains many specifications and options, these should not be construed as limitations on Scope of invention. Many additional variations are implicit and possible.

It has been demonstrated herein that present invention conveys a wide array of inherent advantages not enjoyed by prior art relating to display of back-lighted artwork, not to mention the enabling of entirely novel art forms hitherto unknown. While DESCRIPTION contains many specifications and options, these should not be construed as limitations on Scope of invention. Due to the exhaustive flexibility of present invention, any additional variations are implicit and become practicable.

Accordingly, Scope of the invention should be determined not by embodiments made known and described herein, but by the appended claims and their legal equivalents.

Accordingly, Scope of the invention should be determined not only by embodiments made known and described herein, but by implicit alternative embodiments and their legal equivalents.